

This Nightjar is found in abundance in the little village of Veralupe, that adjoins the town of Ratnapura, but half a mile to the east it does not occur, and a little beyond it again appears in numbers. I can find no explanation for this curious phenomenon, though I have watched the case with curiosity for some years.

[To be continued.]

XXXII.—*Notes on the Birds of Northern Formosa.*

By J. D. D. LA TOUCHE*.

1. *MERULA PALLIDA* (Gm.).

A common Thrush in winter in Northern Formosa. Seen as late as 15th April. I shot at Tokoham on 27th January a male example of this species in full adult plumage, and one showing a little white on the throat. Another shot on the North Hill on 19th February is in nearly as fine plumage as the first of the Tokoham birds.

I have only pale-throated specimens from Fohkien, and one or two of these show a faint eyebrow.

2. *MERULA CHRYSOLAUS* (Temm.).

None of this species were noticed during the winter, but two were obtained near Hobé on 5th and 14th March. Several other Thrushes seen during March and April were, I believe, of the same kind.

3. *MERULA OBSCURA* (Gm.).

One was obtained on North Hill on 19th March.

A party of Thrushes seen on 7th February at Hobé flying

* [In a letter accompanying these notes Mr. La Touche states that he was resident at Tamsui, in Northern Formosa, from October 1894 to July 1895, nearly all the time without a collector. He was able to make but one trip inland, and that a flying visit to the border of the savages' territory—the Japanese, by their misgovernment, having practically closed the country to foreigners.

Mr. La Touche recommends an expedition to "Botel Tobago"—a small hilly and wooded islet about 40 miles east of the south cape of Formosa, which has never been visited by a naturalist. It appears to be what is called in Johnston's Royal Atlas "Bashee Island."—EDD.]

high overhead were thought at the time to be *M. fuscata* from their call. They were going in a north-westerly direction.

4. *GEOCICHLA VARIA* (Pall.).

Two males shot on 4th November and 15th March on the North Hill. A few others were noticed in the same locality.

5. *MONTICOLA SOLITARIUS* (Briss.).

Common in Northern Formosa. Two obtained at Tokoham in January.

6. *MYIOPHONEUS INSULARIS* Gould.

Fairly common about the mountain-streams. I procured six examples from the neighbourhood of Tokoham. One of them was shot quite close to the city. The alarm-note is a plaintive "tzcet." It is a shy bird, and has much the same habits as *M. ceruleus* of China. The stomach of one specimen contained water-insects and freshwater shrimps.

7. *TROCHALOPTERON TAIVANUM* (Swinh.).

Abundant all over the country in the settled districts.

Eggs and nests said to belong to this bird were brought to me on 19th May and throughout June. The breeding-season probably lasts till the late summer, as eggs procured on 1st July were perfectly fresh. The full clutch is apparently three and sometimes two eggs. The shape of the eggs is variable, but a rather short ovate or a nearly true oval appears to be the usual shape. One of the clutches obtained consists of three ovate eggs, measuring $1''\cdot07 \times 0''\cdot78$, $1''\cdot08 \times 0''\cdot77$, and $1''\cdot06 \times 0''\cdot76$. Eleven eggs each measure $1'' \times 0''\cdot8$, and the 21 in my collection average $1'' \times 0''\cdot78$ (excluding an abnormally small clutch of three ovate eggs obtained on 19th May and measuring $1'' \times 0''\cdot7$, $1'' \times 0''\cdot75$, $0''\cdot95 \times 0''\cdot7$). The colour is turquoise-blue, the shell being very smooth and glossy.

The nest is made of leaves, twigs, rootlets, coarse grasses, and bamboo-leaves rather loosely bound together with tendrils, &c., the leaves and broader material forming the secondary base. It is in the shape of a cup of rough

and irregular exterior, about 2'', or a little over, in depth, with an inner diameter of about 3''·25, and an outer diameter of about 7''. The seven nests collected have all a lining of pine-needles or fine roots.

8. *POMATORHINUS MUSICUS* Swinh.

This Scimitar Babbler is very abundant about the lower hills and lowlands in bamboo-grooves and jungle, and is often seen quite close to the sea-shore.

I was unable to obtain any eggs.

9. *ALCIPPE MORRISONIA* Swinh.

Very abundant in Northern Formosa, but never leaving the hills, where it is often the commonest bird. I have seen very large flocks of this bird travelling through the cover on the hills, sometimes accompanied by other small birds.

10. *ALCIPPE BRUNNEA* Gould.

Observed on the savage border near Tokoham.

11. *STACHYRIDOPSIS RUFICEPS* (Blyth).

This interesting little bird is very common in Northern Formosa, frequenting jungle, brushwood, and thick cover in woods. There, as on the continent, it is fond of the company of the *Alcippe* and other small birds. The "company" call-note is a dissyllabic, murmuring, and semi-querulous note, which may be written "Ti-churr" or "Che-djee." When going through cover alone, the call is a loud whistle "Tütütütütü." The bird appears then to be very shy and is not easily approached. The female of a pair obtained in June had the ovaries greatly developed, and was within a few days of laying. Two broods are probably reared.

A little grandson of my old collector at Tamsui discovered a nest on the 23rd June, 1895, while following me in one of my rambles on the North Hill. This nest was placed high in a bush in a wooded ravine. It is made altogether of bamboo-leaves, and is like a short and rather narrow inverted cone.

There were four young birds in the nest, nearly fledged, the tail-feathers just emerging from the quills. I brought

them home carefully, hoping to be able to rear them ; but eventually only one survived for about 18 months.

On the whole the habits of *Stachyridopsis ruficeps* in captivity, so far as one can judge from one example, appear to be those of the Tits combined with those of *Trochalopteron canorum* and *T. taivanum*.

The stretching out the neck for stroking, common, I believe, to these Babblers and their allies, the familiarity and intelligence of this small bird, and its general habits show its affinities with the "Huami" tribe, while its gymnastic feats, its restless way of wandering along the sides and top of the cage, and its habit of searching crevices point to a relationship with the Titmice and their allies.

The nestling plumage of *Stachyridopsis ruficeps* is a dull olive above, quills edged with olive-green. The underparts are greenish buff. The throat of the nestlings taken began to get yellow about a fortnight after I took the nest. The red on the head had appeared in one of them a few days before.

In captivity these birds would appear to be omnivorous, but in order to be kept healthy they should always have fresh insect-food. My tame bird ate bread and milk, raw beef chopped fine, insects of all sorts, fresh or dried, salad, fruit, &c.

12. SUYA CRINIGERA (Hodgs.).

Prinia striata Swinh. Journ. N. C. B. Royal Asiatic Society, 1859, p. 227.

This bird seems to be common enough on the North Hill. I have no doubt that it breeds there. Two specimens were shot: one on 7th April (alt. about 1000 feet), the other in the crater of the North Hill (alt. 2600) on 28th April.

13. PRINIA SONITANS Swinh.

Common in N.W. Formosa, but rather more of a hill-bird than *P. inornata*. It keeps generally to the sword-grass jungle.

I obtained a nest and eggs of this bird on the 23rd June. This nest is a beautiful structure, wholly made of the down

and flower-spikes of the sword-grass. In shape it is somewhat like the nest of *Suya crinigera*, but it is much smaller. It is perfectly oval, the back of the nest well rounded, while the front is rather flat. The aperture is on the upper half of the front side. There is a thin lining of long hair. There were four eggs. Three are typical eggs of *P. sonitans*, ground-colour pale red, heavily marked or suffused with a deeper shade of red which almost conceals the ground-colour. They are highly glossy, and the shape of two is ovate, that of the third being a somewhat rounded ovate. They measure $0''\cdot63 \times 0''\cdot47$, $0''\cdot61 \times 0''\cdot48$, $0''\cdot6 \times 0''\cdot48$.

The fourth egg found in this nest is nearly twice the size of the others, and must, I think, be that of *Cuculus intermedius*. The finder of the nest said it was a double-yolked egg, but, if the size of *P. sonitans* be considered, that is impossible. The ground-colour of this egg is much lighter than that of the others, and it is heavily but very distinctly mottled with a shade of red, darker and of a more brick-red tint than that with which the small eggs are suffused. The shape is oval, both ends being blunt and one end only very slightly smaller than the other. The texture of the shell is coarser and is not nearly so glossy. It measures $0''\cdot82$ by $0''\cdot58$.

These four eggs were somewhat incubated.

14. PRINIA INORNATA Sykes.

Abundant in the Tamsui district. A great many nests and several clutches of eggs were brought to me during the last ten days of June. The ground-colour of the eggs is a pale greenish turquoise-blue, with, in one clutch, a pattern of round spots and a few splashes of several shades of rich madder or reddish-brown with underlying pinkish lilac blotches. Others have large blotches of pale reddish brown, irregular spots of several shades of rich red or madder-brown, and hair-lines; while a few have confluent spots round the thick end of the egg. All have underlying blotches or spots of pinkish lilac. Several eggs, since obtained at Foochow, have the ground-colour distinctly green.

Twenty eggs from Tamsui (all shapes) average 0''·61 by 0''·45. Several green eggs from Foochow average 0''·59 by 0''·43. Four blue ones are of same size as Tamsui eggs.

The nests obtained at Tamsui are like a deep pear-shaped bag or purse, and are attached by a thin upper back wall to leaves of the sword-grass in which they were found. They are made of fine strips of grass, closely and strongly woven and knitted together, and are very strong and elastic. The Foochow nests are of several shapes, some fairly open, some with only a small hole at the side.

15. *CISTICOLA CURSITANS* Frankl.

Abundant in the Tamsui district. It breeds on the downs near the foreign houses at Hobé, and also on the North Hill (alt. 2600 feet), where, on 28th April, I shot specimens in full summer-plumage.

16. *CISTICOLA EXILIS* (Vig. & Horsf.).

Calamanthella volitans Swinh. Journal N. C. B. Royal Asiatic Society, 1859.

Common on the hills in the Tamsui district. I obtained three examples in winter dress on 25th November, 16th December, and 28th January, and two in summer dress (plumage described by Swinhoe) on 1st and 17th May.

17. *SUTHORA BULOMACHUS* Swinh.

Probably abundant on the hills, but I have met with them on only four occasions. They frequent, as a rule, grass-jungle on the hills. Twice I met them close to houses, travelling in company with *Pomatorhinus musicus*, *Stachyridopsis ruficeps*, and other small birds.

I have no hesitation in referring to this bird a nest and two eggs obtained on 25th June. The eggs are short, very blunt ovals; they are of a turquoise-blue colour, and measure 0''·65 by 0''·55.

The nest was apparently placed on reeds, two twigs of which are still adhering to it. It is a neat little cup, made of bits of leaves and coarse grass, bamboo-leaves, strips of bamboo-skin and finer grasses, and bound together with grass-fibre, spiders' webs, and some bits of yellowish silk,

which also appears on nests of *Suthora webbiana*, obtained at Kuatun in N.W. Fohkien. The rim of the nest is well finished and rounded, and adorned with white patches of spiders' webs. The lining is of very fine brownish grass or fibre of some kind.

Depth of egg-cavity 2"; inner diameter about 1".7; outer diameter at rim of nest about 3", and extreme outer diameter about 3".5.

18. *CINCLUS MARILA* (Swinh.).

Hydrobata marila Swinh. Journal N. C. B. Royal Asiatic Society, i. p. 227 (1859).

Six examples, four adult and two young in first plumage, were collected near Tokoham in January and March. At Chioh Meng, where the river leaves the mountains, many were seen on the stony reaches of the river.

Compared with the Fohkien Dipper, this bird appears to be very clearly distinct. It is perhaps smaller on an average; the bill is smaller and more slender, .75" against .85" in Fohkien examples, and the general plumage is somewhat paler.

The two above-mentioned young birds differ from a young *C. pallasi* from N.W. Fohkien in the following particulars:—

The upper parts are of a lighter brown; a few of the scapular-feathers have a part of the subterminal light band white; the quills are more broadly margined with white; the lesser wing-coverts are largely tipped with white along the carpal edge; the larger wing-coverts are also rather distinctly tipped with white; the axillaries and under wing-coverts are brownish-grey, broadly edged with white; the feathers of the cheeks, chin, and throat have whitish centres producing a speckled appearance; the breast-feathers have subterminal pale brown or dingy buff bands, and the rest of the underparts is barred with whitish instead of the deep buff of the Fohkien bird. Wing, ♂, 4"; ♀, 3".8; bill 0".75.

19. *RHYACORNIS FULIGINOSA* (Vig.).

One seen about a torrent at foot of North Hill. It is common on the river near Tokoham.

20. *RUTICILLA AUROREA* (Pall.).

Common during winter at Hobé.

21. *PHYLLOSCOPUS BOREALIS* (Blas.).

One specimen shot near Hobé out of a party on 6th January. The underparts have a strong wash of yellow. Wing 2¹¹.4, bastard primary 0¹¹.4.

The fact of a flock of these Willow-Warblers being found in Northern Formosa in the depth of winter leads one to suppose that this species is a regular winter visitant to the island. The only other Willow-Warbler seen by me in Northern Formosa was believed at the time to be *P. superciliosus*. The calls of sundry Willow-Warblers were heard on several occasions during the spring, but the birds themselves were not seen.

22. *CETTIA CANTURIENS* (Swinh.).

These birds seem to be common during winter in the Tamsui district. There were a great many to be seen or heard during March at Hobé, and they disappeared towards the end of April. On the big banyans that overhang the village at Hobé they could be seen every day, and in April the loud note of this bird was constantly heard from among the brushwood. The call sounds like "koloko-wichit" or "kolo-olo-olo-wichit-chit."

All the examples collected in winter and spring proved on dissection to be males.

23. *CETTIA MINUTA* (Swinh.).

Three specimens collected during the winter. I have generally seen these birds in the company of *C. canturiens*. At Hobé they were rare, but near Tokoham, during January, they appeared to be plentiful, and two or three were often seen hunting together among the brushwood.

24. *HORORNIS SQUAMICEPS* Swinh.

Two shot on 28th October and 2nd December. One was fitting about the top branches of a tall bush in a wood, and the other was busy hunting on the ground under bushes.

25. *MOTACILLA LEUCOPSIS* Gould.

Common during the winter, and no doubt resident in Northern Formosa, as I have a young bird of the year shot near Hobé on 27th April.

The black on the fore-neck and breast of three examples shot in November (Southern Formosa) and in January and March (Northern Formosa) is quite as much developed as in breeding examples from Fohkien. The back is also pure black. I do not remember seeing grey-backed birds in winter. Anyhow, I was much struck by the pure black backs of the birds observed. In Fohkien grey backs are far commoner than black backs during the winter.

26. *MOTACILLA OCULARIS* Swinh.

Common during the late autumn; probably a winter visitant. I have two examples shot on 24th February and 27th March. The latter bird is in moult.

27. *MOTACILLA TAIVANA* (Swinh.).

One of the commonest birds in Formosa during winter. Three examples shot in March near Hobé are in moult, and are beginning to assume the adult breeding-plumage. One shot on 7th April has the underparts bright yellow with only here and there a white feather of the immature plumage.

On the 28th May I saw at Hobé a small flock of green-backed Wagtails with bright yellow underparts. They were probably of this species.

28. *MOTACILLA MELANOPE* Pall.

Seen in winter on the plains and in the mountains near Tokoham.

29. *ANTHUS MACULATUS* Hodgs.

Observed for the first time on 19th November, after which their numbers increased, and during the winter they were very common in the acacia-woods.

30. *ANTHUS CERVINUS* (Pall.).

Very abundant throughout the winter. Specimens in full moult shot in March and on 7th April.

One specimen shot in winter had been feeding on paddy.

31. ANTHUS RICHARDI Vieill.

There were always a few of these Pipits to be seen during the winter on the downs behind our house at Hobé. They were fond of perching on the telegraph-wires and were very wild. Four specimens were obtained; the last was shot on 25th March and was in moult. I heard one on 21st April. The examples collected belong to the larger race that winters in Fohkien.

32. HYPSSIPETES NIGERRIMUS Gould.

Very few, if any, of these birds are found near Hobé in winter. I saw one on the North Hill on 4th November, but did not see any more till the 17th February. After this date they became common in the country, and a few pairs settled at the port, where, I believe, they nested on the banyans and higher trees.

A nest was brought to me by the old man who used to collect for me on the 25th June. It contained three eggs slightly incubated. The ground-colour of these eggs, originally a lovely orange-pinkish white, has now faded to a dull pinkish white. Two of the eggs have irregular spots, of two or three shades of brown (one nearly black), chiefly gathered at the thick end in an irregular ring, and have underlying blotches of a bluish-grey colour. In the other egg the spots are spread over the whole egg, but are rather more numerous about the thick end. The shape of these eggs is a slightly elongated oval. The texture of the eggs is smooth and glossy. They measure $1'' \times 0''\cdot7$; $1''\cdot02 \times 0''\cdot72$; $1''\cdot05 \times 0''\cdot73$.

The nest is made of bamboo-leaves, twigs, and (on the outside) of moss, with a few cobwebs attached. It is lined with pine-needles and very fine twigs or leaf-stalks. It is a shallow cup, about $1''\cdot5$ deep; inner diameter about $3''\cdot5$, outer diameter about $5''$. This nest bears a general resemblance to two of *H. leucocephalus* from Fohkien.

33. PYCNONOTUS SINENSIS (Gm.).

I procured eggs of this abundant species on 19th May and on 1st July. The former were much incubated; the

latter were quite fresh, and were three in number. The ground-colour of the eggs composing this clutch is a very pale mauve, almost white, speckled with lake spots over lilac-grey underlying spots. The markings are more numerous on the large end of the eggs and form a cap. The shape is ovate. Size $0''\cdot9 \times 0''\cdot62$, $0''\cdot85 \times 0''\cdot62$, $0''\cdot83 \times 0''\cdot6$.

A nest obtained at Hobé is made of sword-grass flower-spikes with an inner foundation of leaves and bamboo-leaves, the primary foundation of the nest being the sword-grass flower-spikes with the down still attached. It has a lining of fine rootlets. Depth of egg-cavity $2''$; outer depth of nest $3''\cdot5$; inner diameter about $2''\cdot6$; outer diameter at rim $3''\cdot8$; largest outer diameter about $5''$.

Another nest from the same locality is similar to the above, but is without the primary foundation, and the lining is of stripped sword-grass flower-spikes. The egg-cavity is rather deeper.

Both the eggs and the nests of this Bulbul vary considerably, the former in shape, in depth of colour, and in the size of the spots, and the latter in the material employed.

34. *ORIOLOUS DIFFUSUS* Sharpe.

This Oriole remains very late in Northern Formosa and reappears early in spring. It winters in Southern Formosa.

35. *BUCHANGA ATRA* (Herm.).

Abundant and resident in Northern Formosa.

36. *LANIUS SCHACH* Linn.

Also abundant and resident. One that frequented our compound at Hobé delighted in perching on the top of the lighthouse, or on the top branches of one of the bigger trees, and in giving us in rapid succession the song or calls of all the common birds of the locality.

37. *LANIUS LUCIONENSIS* Linn.

Observed at Hobé on 11th November, and once or twice during the winter. I shot an adult specimen on 23rd

February, and saw during the spring a few other small Shrikes, which appeared to be of this species.

38. *NILTAVA CYANOMELÆNA* (Temm.).

A female shot in a wood on North Hill on 28th October.

39. *HYPOTHYMIS AZUREA* (Bodd.).

A common resident species in Northern as in Southern Formosa. I noticed it at Hobé in the spring, and believe that, like *H. nigerrimus*, a few pairs come to breed about the settlement.

40. *HEMICHELIDON SIBIRICA* (Gm.).

One shot on North Hill on 4th November.

41. *TARSIGER CYANURUS* (Pall.).

A young male shot on North Hill on 28th October. One or two others were seen in the district.

42. *HIRUNDO GUTTURALIS* Scop.

I believe that this Swallow winters in Formosa in some numbers. I have seen it in Northern Formosa till late in the year, and it appeared again early in the following spring.

43. *HIRUNDO STRIOLATA* Temm. & Schl.

Resident and common in North-western Formosa. The Chinese, in whose houses these Swallows and the Chimney Swallows breed freely, will on no account allow the nests to be disturbed.

A pair built their nest in the doctor's verandah at Hobé. It was placed against the back wall where the wall met the ceiling, and was a retort-shaped structure. Both birds worked at the nest.

The striped Swallows seen in South Formosa (Ibis, 1895, p. 334), and doubtfully referred to *H. nipalensis*, no doubt were of this larger race.

44. *COTILE SINENSIS* (J. E. Gray).

Seen on the Taipei-fu plain and near Tokoham in winter. One was shot on 21st February.

45. *ZOSTEROPS SIMPLEX* Swinhoe.

One of the commonest birds in North-western Formosa.

I procured several nests said to belong to this species. They all appear to have been placed on bamboos. I have also a clutch of three eggs which I refer to this bird. These are of a very pale greenish-blue, unspotted, and measure $0''\cdot7 \times 0''\cdot47$, $0''\cdot67 \times 0''\cdot46$, $0''\cdot64 \times 0''\cdot45$. The shape is a rather elongated ovate, apex sharp.

46. *ALAUDA SALA* Swinh.

Alauda sala Swinhoe, Ibis, 1870, p. 354.

These Larks are very common in Northern Formosa. I found a nest on the downs behind our house on 12th May. It contained three fresh eggs. The nest was made of grass closely woven together and worked into the live grass. It was not quite on a level keel, and was partly sheltered on the north-east side by a thin clump of weed. The ground-colour of the eggs is greenish white, and they are thickly speckled with light brown and grey, the specks forming in two of the eggs a fairly distinct ring round the thick end. The shape is a somewhat short ovate. They measure $0''\ 86 \times 0''\cdot63$, $0''\cdot85 \times 0''\cdot63$, and $0''\cdot83 \times 0''\cdot62$.

47. *EMBERIZA SPODOCEPHALA* Pall.

This Bunting was very common in Northern Formosa during the winter, and specially so in March and April. Adult males seemed to be more abundant than on the opposite mainland.

48. *PASSER MONTANUS* (Linn.).

A clutch of five eggs of this bird was brought to me at Hobé on 16th June. These eggs are white, with sepia-coloured longitudinal splashes or spots over grey underlying spots, and resemble specimens from Fohkien.

I have a variety of this Sparrow, shot by a friend at Hobé. In this bird the maroon-brown of the head and upper wing-coverts of the normal bird has become light red, the black markings of the upper back, sides of face, and throat are brown, and the lower back, wings, and tail are of a light buff or pale straw-colour. The bill was reddish, eyes brownish red tarsi and feet pale brownish red.

49. *MUNIA ACUTICAUDA* Hodgs.

50. *MUNIA TOPELA* Swinh.

Both these *Munias* are very abundant. I obtained eggs and nests during May and June.

51. *COCCOTHAUSTES MELANURUS* (Gm.).

A fine male visited our garden at Hobé on 16th April. It flew about the compound excitedly, and kept calling to a caged bird of the same kind in the verandah. It was possibly an escaped cage-bird.

52. *SPODIOPSAR CINERACEUS* (Temm.).

Very common in the Tamsui district during the winter. One was shot on the 25th March. I did not notice any after this date.

53. *ACRIDOTHERES CRISTATELLUS* (Linn.).

The Crested Mynah seems to be even rarer in Northern Formosa than in the south of the island. I saw six at Tokoham in January, and a pair came flying about our house at Hobé in the spring of 1895. They appeared greatly excited and flew wildly round the house, being joined, after a short time, by my three tame birds of the same species. The five birds had several flights together, and at last the new arrivals flew off across the river accompanied by one of my birds, which returned alone after a few minutes' absence.

The above-mentioned tame Mynahs were taken from the nest and reared in Amoy. During my stay at Tamsui they became so tame as to follow me for some distance when out for a walk. Two of them paired early in the spring. The female was the first to make advances, and for a long time was beaten off by the cock bird. On putting up a box for them on a wardrobe in my bedroom they adopted it at once, and built a ragged nest of straw, sticks, and all kinds of rubbish. The first egg was laid on 16th May, after which I found it lying broken in the verandah. Three other eggs were laid in odd corners of the room or verandah. The pair became very fierce as soon as the first egg was laid, and attacked any one who came near the nest. There used to be

such desperate fights between the paired birds and the unmated one, a female, that I had to keep them separate.

54. *CORVUS MACRORHYNCHUS* Wagl.

An example shot on the Taipei-fu plain in March does not appear to differ from Fokien birds.

Crows are unknown at Hobé, but they occur in small numbers on the Taipei-fu plain. I saw a small flock near Tokoham in January. I did not see a single Magpie during my seven months' stay at Tamsui, nor did I notice any at Tokoham.

55. *DENDROCITTA FORMOSÆ* Swinh.

Seen on the savage border near Tokoham.

56. *UROCISSA CÆRULEA* Gould.

I found this bird to be common in the hills near Tokoham. Among their calls they have the musical "pink, pink" of the Chinese *Urocissa*. They travel in small flocks and would appear to have much the same habits as *U. sinensis*. A flock of these magnificent Blue Magpies flying about the face of a steep mountain or cliff is a sight to be remembered.

One of the four specimens collected at Tokoham has a single white feather on the head; another has one on the back.

57. *CYPSELUS SUBFURCATUS* Blyth.

A flock of small Swifts was seen at Hobé on 27th May. It was dull and rainy at the time. I did not see them again.

58. *CAPRIMULGUS STICTOMUS* Swinh.

A Goatsucker was to be seen for several days in November near the British Consulate at Hobé. I neglected to secure this bird and did not see another again.

59. *ALCEDO BENGALENSIS* (Gm.).

Very common.

60. *CUCULUS INTERMEDIUS* Vahl.

Cuculus kelungensis Swinhoe, Ibis, 1863, p. 394 (?).

This Cuckoo summers in the Tamsui district, and is very common in spring and early summer. I obtained my first

specimen on 6th April, and whenever I went to the North Hill after that date I either saw them or heard them calling. The note is loud and deep in tone, and may be expressed in writing as "Hoo-hoo, hoo-hoo." It is repeated for some minutes at a stretch, and when heard from a distance is not unlike the far-away barking of a dog.

The stomachs of the five examples collected were full of hairy caterpillars.

The wings measure from carpal joint—7^{''}.2, 7^{''}.2, 7^{''}.3, 7^{''}.3, and 7^{''}. All are males. The only variation in plumage is in the spots on the central rectrices. In one example these are entirely absent.

61. CENTROPUS BENGALENSIS (Gm.).

A very common bird in Northern Formosa.

I have two breeding females obtained on 1st May and 16th June. The stomach of the former contained beetles, that of the latter held a collection of stick-insects and a lizard.

Two eggs, said to be of this bird, were brought to me at the beginning of June. I have little doubt as to the authenticity of these eggs, as they answer to the general description of Crow-Pheasants' eggs. They are of a dirty white; in shape one is ovate with rounded apex, the other is a rounded ovate with very blunt apex. Texture of shell chalky. They measure 1^{''}.27 × 0^{''}.97, 1^{''}.22 × 0^{''}.95.

62. SCOPS JAPONICUS Swinh.

Two male examples, one light grey and one dark grey, were obtained at Hobé on 1st November and 19th February. Both were caught at night in houses. A specimen in red plumage was sent to me from Takow by Dr. Henry, who had caught it in his house. This appears to be a young bird, as one downy feather of the nestling-plumage still remains on the head. The female collected at Bangkimtsing in 1893, and recorded in 'The Ibis' of 1895, p. 337, as *S. pennatus*, belongs to this species. These four skins were kindly identified for me by Mr. F. W. Styan.

63. SCOPS GLABRIPES Swinh.

An example of this species bought on 7th March.

A large Owl (*Bulaca newarensis*?) occurs in the mountains of North Formosa. One was kept alive in a cage for some time by one of the foreign merchants at Twatutia. I only heard of it some days after it had died and the body had been thrown away.

64. PANDION HALIAËTUS (Linn.).

One was seen flying over the river at Hobé.

65. CIRCUS ÆRUGINOSUS (Linn.).

Common in winter on the Taipei-fu plains.

66. CIRCUS SPILONOTUS Kaup.

I have a fine male, not quite mature, shot by Mr. Siebenman, of Twatutia, in January.

67. SPILORNIS CHEELA (Lath.).

A Hakka soldier on the savage border near Tokoham showed me the wings, bill, and legs of an Eagle, shot by him with his rifle, which was probably of this species. As Eagles were always being seen circling high overhead, I was in hopes of getting one, and neglected to secure the relics offered to me.

Spizaëtus nipalensis also occurs, no doubt, in these mountains.

68. ACCIPITER NISOIDES Blyth.

A young female was given to me by a friend in December. Length about 12^{''}.5, wing 7^{''}.25. Iris yellow, legs yellow.

I saw Sparrow-Hawks on North Hill on 17th February and 27th April.

69. FALCO PEREGRINUS Linn.

A Peregrine Falcon was seen on several occasions during February on a cliff by the river.

70. FALCO TINNUNCULUS Linn.

Very common during the winter.

71. MILVUS MELANOTIS T. & S.

Common all the year round. They probably breed on North Hill.

72. TURTUR CHINENSIS (Scop.).

Very uncommon at the port, but abundant inland.

73. PHASIANUS FORMOSANUS Elliot.

Not at all common near the port. Seen once on North Hill on 28th April. It is said that in former years Pheasants were often seen and shot near Hobé. Advancing cultivation has driven them away.

74. EUPLOCAMUS SWINHOII Gould.

This beautiful Pheasant is sometimes brought for sale to Taipei-fu. It is said to be rare in the North of Formosa. A friend of mine was told by the late Mr. Holst that it was very common in the mountains of Central Formosa.

75. BAMBUSICOLA SONORIVOX Gould.

Common on the hills, but owing to the thick cover it is impossible to get at them.

A large Quail flushed out of a paddy-field near Hobé appeared to me to be a Common Quail (*Coturnix communis* or *C. japonica*).

76. EXCALFACTORIA CHINENSIS (Linn.).

I flushed once a little Quail near Hobé that was, no doubt, of this species.

77. TURNIX TAIGOOR Sykes (?).

A Bustard-Quail is common in Northern Formosa, but I secured only one specimen, a female. It was shot on 13th January just behind our house at Hobé, on the downs, where in former years it seems these small Quails were numerous.

This bird is described in 'The Ibis,' 1896, p. 494. It matches almost exactly in colour and markings a male from Southern Formosa, which again is very like a male from the Straits Settlements in Mr. C. B. Rickett's collection. It is very likely a young female of the year.